Filing Date: March 22, 2004

Title: HEAT SPREADER WITH DOWN SET LEG ATTACHMENT FEATURE

Assignee: Intel Corporation

## **IN THE CLAIMS**

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Please amend the claims as follows.

Claims 1-6. (Canceled)

7. (Currently Amended) A method of forming a heat spreader comprising:

forming a mass of material into a body approximately rectangular in shape having a top surface, a bottom surface and at least one corner; and

forming at least three downset legs on the mass of material, wherein the at least three downset legs are formed to be downset from the bottom surface and wherein the at least three downset legs and the bottom surface define a cavity for placement of a microelectronic die, the cavity having a depth less than or equal to a thickness of the die.

- 8. (Previously Presented) The method of claim 7, wherein the forming a mass of material comprises at least one cold forming process.
- 9. (Previously Presented) The method of claim 7, wherein the method further comprises forming at least one notch on the mass of material, wherein the notch is formed in the vicinity of the corner.
- 10. (Original) The method of claim 7, wherein at least one void is formed on the at least one downset leg, wherein the void is configured to receive at least one mechanical attachment device.
- 11. (Previously Presented) The method of claim 7, wherein the at least one downset leg is formed to be configured to receive at least one clamp.

12-25. (Canceled)

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26. (Previously Presented) The method of claim 7, wherein the at least one downset leg is formed to be configured to received at least one clip.

- 27. (Previously Presented) The method of claim 7, further comprising forming at least one notch formed between the top surface and the bottom surface proximate to the at least one corner.
- 28. (Currently Amended) A method of forming a heat spreader comprising:

  forming a body having a top surface, a bottom surface, at least one side and at least one corner:

forming at least three downset legs formed to be downset from the body bottom surface by a distance wherein the at least three downset legs and the body bottom surface define a cavity between the legs cavity for placement of a microelectronic die, the distance being a depth less than or equal to a thickness of the microelectronic die.

- 29. (Previously Presented) The method of claim 28 wherein forming the body includes forming the body with four downset legs formed thereon, and wherein each downset leg is formed proximate to a separate corner of the heat spreader body.
- 30. (Previously Presented) The method of claim 28, wherein forming the at least one downset legs further includes forming the downset legs with a void formed therein, and wherein the void is configured to receive at least one mechanical attachment device.
- 31. (Previously Presented) The method of claim 28, further including forming at least one downset leg to be configured to receive at least one clip.
- 32. (Previously Presented) The method of claim 28, wherein the body and at least one downset leg are comprised of thermally conductive material.

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(Previously Presented) The method of claim 28, wherein the cavity is configured to 33. receive at least one microelectronic die.

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- (Previously Presented) The method of claim 28 wherein forming the body includes 34. forming the body in a rectangular shape.
- (Previously Presented) The method of claim 28 wherein forming the body includes 35. forming the body in an octagon shape.
- (Currently Amended) A method of forming a heat spreader, comprising: 36.

forming a body having a top surface, a bottom surface, a periphery and at least one side in a shape having a plurality of corners;

forming a plurality of legs extending down from the bottom surface on the periphery of the body and thereby forming a semiconductor die cavity under the bottom surface of the body for placement of a semiconductor die, the depth of the cavity being less than or equal to a thickness of the microelectronic die, the plurality of legs being attached to a non-contiguous lip around the body; and

forming a notch between the top surface and the bottom surface in proximity to the at least one corner.

- (Previously Presented) The method of claim 36 further including attaching a 37. microelectronic die to the bottom surface of the bottom surface within the cavity.
- (Previously Presented) The method of claim 36 wherein forming a plurality of legs 38. includes forming each of the plurality of legs in a corresponding one of the plurality of corners.
- (Previously Presented) The method of claim 38 further including forming a mechanical 39. attachment mechanism in each of the plurality of corners.

AMENDMENT UNDER 37 C.F.R. 1.116 – EXPEDITED PROCEDURE

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40. (Previously Presented) The method of claim 39 further including forming a notch in the top surface of the body in each of the plurality of corners.

41. (Previously Presented) The method of claim 40 wherein the top surface is approximately rectangular in shape.

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